Dynamic Allocation of Shared Cache Directory for Optimizing Performance

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ABSTRACT OF THE DISCLOSURE

Methods, apparatus, and program product are disclosed for use in a computer system to provide for dynamic allocation of a directory memory in a node memory

10   controller in which one or more coherent multiprocessor nodes comprise the computer system. The directory memory in a node is partitioned between a snoop directory portion and a remote memory directory portion. During a predetermined time interval, snoop directory entry refills and remote memory directory entry refills are accumulated. After the time interval has elapsed, a ratio of the snoop directory entry refills to the

15   number of remote memory directory entry refills is computed. The ratio is compared to a desired ratio. Respondent to a difference between the ratio and the desired ratio, adjustments are made to the allocation of the memory directory between the snoop directory and the remote memory directory.